ANOPLIUS DUFOUR, 1834 (INSECTA, HYMENOPTERA): PROPOSED DESIGNATION OF A TYPE-SPECIES WITH PROPOSED DESIGNATION OF NEOTYPES UNDER THE PLENARY POWERS FOR *SPHEX NIGRA* FABRICIUS, 1775 AND *SPHEX NIGERRIMUS* SCOPOLI, 1763.

Z.N.(S.) 1845

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The generic name *Anoplius* Dufour has been unanimously considered to be a taxon of the spider wasp family Pompilidae since it was described by Dufour. Recently J. van der Vecht (1961, p. 19) examined the type material of the type-species, *Sphex niger* Fabricius, 1775 (originally described as *Sphex nigra*), and discovered that it is a species of the family Sphecidae (genus *Liris* Fabricius, 1804). J. de Beaumont (1961, p. 239) examined the Fabrician specimen declared by van der Vecht to be the type, and while agreeing that it was a *Liris*, concluded that it did not agree with the original description and was in fact not a European species. Fabricius (1775) gave " in Europa " as the origin of his material. Irrespective of whether or not the specimen in question is the true type of *Sphex niger* Fabricius, there is no doubt that Fabricius based his description of *niger* on a sphecid wasp as van der Vecht (1961) has demonstrated. Therefore *Anoplius* would become a junior synonym of the sphecid genus *Liris* unless the Commission invokes its plenary powers as suggested at the end of this petition. Furthermore, the common pompilid genus heretofore called *Anoplius* will have to be called something else, probably *Pompilioides* Radoszkowski, 1887. In view of the fact that *Anoplius* has enjoyed long standing as a genus in the Pompilidae (90 years) around which a large literature has been built (Šustera, 1912; Haupt, 1927; Arnold, 1937; Evans, 1951; Evans, 1966; Wolf, 1963, to cite a few examples), it is highly desirable to ensure continued usage of *Anoplius* in the Pompilidae.

Although the case is basically simple in solution because the problem centres on a misidentified type-species, there are some side issues which may confuse the reader unless they are related in detail. Therefore a rather lengthy discussion is deemed necessary.

History of the name *Sphex niger*

2. Fabricius (1775) described *Sphex niger* and according to van der Vecht (1961, p. 20) " the original description, although consisting of a single line, leaves no doubt that it is based on a larrid [i.e. Sphecidae], not on a pompilid wasp ". Fabricius' description reads " *Sphex nigra*, abdomine sessili, segmentorum marginibus lucidis ". As van der Vecht points out Fabricius in later works confused his *niger* " with some black Pompilidae in which the base, not the [apical] margin, of some of the gastral segments is sericeous (' lucidis ')". For example, Fabricius (1793) added the following to his original *niger* diagnosis:

" Parva. Statura omino S. viaticae at tota nigra ". In his 1798 and 1804 works Fabricius makes it clear that he considers *niger* as a Pompilid by transferring the name to the genus *Pompilus*. Van der Vecht found both a *Liris* and several pompilids under the name *niger* in Fabricius' collection in Copenhagen.

3. Fabricius' own confusion concerning the identity of *niger* gave the species a double identity. Most authors perpetuated Fabricius' own misidentification of *niger* as a pompilid; Panzer, 1799; Lepeletier, 1825; Van der Linden, 1827; Dufour, 1834; Dahlbom, 1843; Lepeletier, 1845, to cite some early precedent-setting examples.

4. Latreille (1805, p. 295) was apparently the first contemporary of Fabricius to use *niger* in the original concept of Fabricius. Latreille placed *niger* in the sphecid genus *Larra*. Van der Linden (1829) redescribed a *Tachytes* (Sphecidae) which he tentatively identified as conspecific with *Larra nigra* of Latreille. Because of Van der Linden's uncertainty as to whether his *Tachytes niger* was identical with *Larra nigra* of Latreille, nearly all subsequent authors have considered that Van der Linden actually described *Tachytes niger* as a new species (Lepeletier, 1845; Pate, 1937; Beaumont, 1961; for example). Such reasoning is erroneous, however, as was first pointed out by Richards (1935). Examination of Van der Linden's paper demonstrates that he placed the abbreviation " n. sp." after every new species he described. There is no such appellation after *Tachytes niger*. He was merely redescribing a species which he tentatively identified as *Larra nigra* of Latreille.

5. Therefore, both the sphecid *Tachytes niger* of Van der Linden, and the pompilid *Pompilus niger* of Dufour refer back to *Sphex niger* Fabricius, 1775.

History of the name *Anoplius*

6. Léon Dufour received some wasps from Lepeletier among which was a pompilid species labelled " *Anoplius niger* Fabricius ". Unaware that *Anoplius* was only a Lepeletier manuscript name, Dufour (1834) unintentionally but validly published the first description of the genus. Dufour included only two species in *Anoplius:* " *Anoplius niger* (*Pompilus niger*, Fabr.) " and a new species *uniocellatus*.

7. It is safe to assume that Dufour's *Anoplius niger* is conspecific or at least congeneric with *Pompilus niger* of Lepeletier, 1825, inasmuch as Dufour received the material from Lepeletier. Furthermore, it is certain the *niger* of both authors was a pompilid. Interestingly enough, Dufour's *uniocellatus* is, on the other hand, undoubtedly a sphecid of the genus *Liris*, and possibly conspecific with true *niger* Fabricius.

8. In 1845 Lepeletier finally published his description of *Anoplius*. Thirty-five species were included, among them " *Pompilus niger Fab.*"

Events following the description of *Anoplius*

9. Rogenhofer and Dalla Torre (1882) reviewed the wasps described in 1763 by Scopoli. They declared that *Sphex nigerrimus* Scopoli (originally described as *Sphex nigerrima*) was a senior synonym of " *Pompilus niger* Van der Linden " [1827, which = *Anoplius niger* of Dufour et al.]. *Anoplius*

nigerrimus has been accepted by all subsequent taxonomists as the proper name for the pompilid formerly known as *niger*.

10. W. Fox (1901) gave the first valid type designation for the genus *Anoplius* Dufour when he cited " *Anoplius nigerrimus* (Scopoli) [*Pompilus niger* Fabricius "] as type-species. Thus *Sphex niger* Fabricius, 1775, is the type-species of *Anoplius*.

11. J. van der Vecht (1961) demonstrated that *Sphex niger* Fabricius is a sphecid of the genus *Liris*, not a pompilid. Furthermore, he indicated that *Tachytes niger* of Van der Linden, 1829, is a synonym of *Sphex niger* Fabricius, and that there are reasons to doubt whether the present interpretation of *Sphex nigerrimus* Scopoli is correct.

12. J. de Beaumont (1961) examined the specimen that van der Vecht considered as the type of *Sphex niger* Fabricius, and declared that it does not belong to any of the known European species. Thus one has a choice of assuming that either (A) Fabricius gave an erroneous type locality, or (B) that the specimen accepted by van der Vecht as being the type is not the type. In either case van der Vecht has conclusively demonstrated that *Sphex niger* was based on a sphecid wasp.

13. In summary it seems desirable to:

(a) maintain *Anoplius* in its present sense, that is, for the genus of Pompilidae which has its type-species *Sphex nigerrimus* Scopoli (= *Anoplius niger* sensu Dufour, 1834, nec *Sphex niger* Fabricius, 1775);

(b) *fix the identity of the long misinterpreted sphecies *Sphex niger* Fabricius, 1775, by selecting as neotype of the taxon, a specimen of the wasp currently known by the name *Liris niger* (Van der Linden), 1829;

(c) *insure the continued usage of the name *Sphex nigerrimus* Scopoli, 1763, in the sense of Rogenhofer and Dalla Torre, 1882, and later authors, by selecting as neotype a specimen of the wasp currently known by the name *Anoplius nigerrimus* (Scopoli), 1763.

14. The International Commission on Zoological Nomenclature is therefore requested:

(1) to use its plenary powers to set aside all designations of type-species for the genus *Anoplius* Dufour, 1834, made prior to the ruling now requested, and having done so to designate *Sphex nigerrimus* Scopoli, 1763, to be the type-species of that genus;

(2) to use its plenary powers to set aside all designations of type-specimens for *Sphex niger* Fabricius, 1775, and *Sphex nigerrimus* Scopoli, 1763, made prior to the Ruling now requested, and having done so, to recognize as neotype of:

  (a) *Sphex niger* Fabricius, 1775, a female specimen identified as *Liris niger* (Van der Linden), 1829, by J. de Beaumont, the current world authority on this species, to which the following data are attached: Carpentras, Vaucluse, France, 17–20–IX–1933, leg. J. de Beaumont. This specimen to be deposited in the Fabrician

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* A neotype for *niger* is desirable also because there is some question as to whether or not the true type is still in existence; and in the case of *nigerrimus* the original type material is certainly no longer extant.

Collection at the Universitetets Zoologiske Museum, Copenhagen, Denmark.

(b) *Sphex nigerrimus* Scopoli, 1763, a female identified as *Anoplius nigerrimus* (Scopoli), 1763, by H. Wolf, the current world authority on this species, to which the following data are attached: Peney [near Geneva, Switzerland], 15 Aug. 1876, leg. Tournier. This specimen to be deposited in the Rijksmuseum van Natuurlijke Historie, Leiden, the Netherlands.

(3) to place the generic name *Anoplius* Dufour, 1834 (gender: masculine), type-species, by designation under the plenary powers in (1) above, *Sphex nigerrimus* Scopoli, 1763, on the Official List of Generic Names in Zoology;

(4) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *nigerrimus* Scopoli, 1763, as published in the binomen *Sphex nigerrimus* (type-species of *Anoplius* Dufour, 1834);

(b) *niger* Fabricius, 1775, as published in the binomen *Sphex niger.*

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